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10/577,727	05/02/2006	Yoichi Miyagawa	285079US6X PCT	3225
22850 7590 10/15/2009 OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, L.L.P. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER NGUYEN, SIMON				
ART UNIT 2618		PAPER NUMBER		
NOTIFICATION DATE 10/15/2009		DELIVERY MODE ELECTRONIC		

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/577,727

Applicant(s)

MIYAGAWA ET AL.

Examiner

SIMON D. NGUYEN

Art Unit

2618

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 04 August 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-13 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-13 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF/ICE)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings were received on 8/4/09. These drawings are accepted.

Response to Amendment

2. The amendment under 37 CFR 1.132 filed 8/4/09 is sufficient to overcome the rejection of claims 1-7 based upon Masui.

Response to Arguments

3. Applicant's arguments with respect to claims 1-7 have been considered but are moot in view of the new ground(s) of rejection.

The new cited art issued to Hayaashi et al. (US 2005/0009564 A1) alone discloses all limitations in independent claims 1, 7 and 8. However, for the sake of time consumption, Examiner decides to combine with Masui in order to reduce time for writing the Office Action.

Secondly, Documents submitted with 371 Applications filed 8/5/08 indicated that the Japanese Document 1: JP, 2004-151750, Sony corp., 27 May, 2004 disclosed all limitations in independent claims 1, 7-8, especially the document disclosed first and second transmitting signals through the same antenna when the IC chip in a reader/writer operation or in a contactless IC card operation, respectively (see page 3 of the document).

Claim Rejections - 35 USC § 103

4. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 1-3, 5-8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui (US 6,809,952) in view of Hayaashi et al. (US 2005/0009564 A1).

Regarding claim 1, Masui discloses a semiconductor IC (a RFID transponder) having a non-contact IC card function and a wireless reader/writer function (abstract, figs.1, 9, 13), comprising: an antenna (24) for communication with the reader/writer (12); a demodulator (36) for demodulating a receiving signal transmitted from the reader/writer; a full-wave rectifier (26) and smoothing circuit (CL1, CL2) for rectifying and smoothing the received signal; a transmission means (generating by modulator 38) for transmitting a first transmission signal (RF1) to the reader/writer 12 through the antenna 24 and a second transmission means (also the modulator 38) for transmitting a second transmission signal (RF 2) to the non-contact IC card through the first antenna (column 5 line 59 to column 6 line 57, column 7 lines 10-16, column 10 lines 1-62, column 11 line 50 to column 12 line 8). However, Maui fails to teach transmitting a first transmitting signal to an external wireless reader/writer through a first antenna while the IC is a non-contact card mode of operation and transmitting a second transmission

signal to an external non-contact IC card through the first antenna while the IC is in a wireless reader/writer mode of operation.

Hayaashi discloses an IC chip (171) having a contactless card and a reader/writer circuit use in a mobile phone (figs. 7-8), comprising: transmitting a first transmitting signal to an external wireless reader/writer through a first antenna (161) while the IC is an non-contact card mode of operation (If the function of a contactless IC card is available, the contactless IC card reader/writer performs communication with the external reader/writer in a contactless manner, for example) and transmitting a second transmission signal to an external non-contact IC card through the first antenna (161) while the IC is in a wireless reader/writer mode of operation (if the function of serving as a reader/writer is available, the contactless IC card reader/writer performs communication with an external contactless IC card, for example) (paragraphs 123-125, 131, 138, 259). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Masui, modified by Hayaashi in order to have a mobile to function besides making a phone call also be able to transmit a signal for an external contactless IC card when the chip in a reader/writer function as well a signal for an external reader/writer when the chip is in a contactless IC card function. The reason to combine being that it saves space and improves the performance of the mobile phone.

Regarding claims 7-8, these claims are rejected for the same reason as set forth in claim 1.

Regarding claim 2, Masui further discloses stabilizing the power obtained from the received signal (column 6 lines 25-35).

Regarding claim 3, Masui further discloses the first transmission means (data modulator 38) is connected behind the rectifier and smooth circuit by changing the load of a second antenna (22) of reader/writer electromagnetically coupled with the first antenna (fig.1, column 6 lines 53-57, column 9 line 42 to column 10 line 33).

Regarding claim 5, Hayaashi discloses the first transmitting signal is transmitted to the external reader/writer when the chip functioning (operating) as a contactless IC card and the second transmitting signal is transmitted to the external contactless IC card when the chip functioning (operating) as a reader/writer, therefore, the first transmitting signal and the second transmitting signal are different signals (paragraphs 123-125, 131, 138, 259).

Regarding claim 6, Hayaashi discloses a receiver 163 for receiving different signals, a first signal receives from the external reader/writer when the chip in a operation mode of a contactless IC card which is different a signal receiving from the external contactless IC card when the chip in an operation mode of a reader/writer (fig.7, paragraphs 123-125, 131, 138, 259).

Regarding claims 9-13, Hayaashi discloses a mobile phone equipped with the IC chip having the wireless reader/writer circuit/the contactless IC card. In order for the mobile phone to operation in transmitting/receiving data when the mobile phone operating as the reader/writer or as the contactless IC card, a battery for supply power is inherently in the mobile phone because without the battery to supply power, the

mobile phone can not operate (or more information about a battery to supply power in a mobile phone to operate as a reader/writer or a contactless IC card see Arisawa et al. (US 2009/0237144 A1).

6. Claim 4 is rejected under 35 U.S.C. 103(a) as being unpatentable over Masui (US 6,809,952) and Hayaashi, and further in view of Arisawa (US 7,016,432).

Regarding claim 4, the modified Masui fails to teach the other end of the second transmission means is connected to an intermediate tap of the first antenna.

Arisawa discloses a contactless ID card system having a contactless IC card and a reader/writer (abstract, figs. 7), wherein the contactless IC card comprising modulating/demodulating units, wherein the modulating units transmits two transmission signals (SC and TX (D (R-C))), wherein an end of a second transmission means (signal TX (D (R-C) is connected to an end of first antenna 28 (via TR, R98) and the other end is connected to an intermediate tap (T3) of the first antenna (fig.20). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have Masui, modified by Arisawa in order to have one antenna as a function of two antennas.

7. Claims 9-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Masui (US 6,809,952) and Hayaashi, and further in view of Arisawa (US 2009/0237144 A1).

Regarding claims 9-13, Hayaashi discloses a mobile phone equipped with the IC chip having the wireless reader/writer circuit/the contactless IC card. In order for the

mobile phone to operation in transmitting/receiving data when the mobile phone operating as the reader/writer or as the contactless IC card, a battery for supply power is obvious in the mobile phone.

Arisawa discloses a battery supplying power to a mobile phone, wherein the battery supplies power to a reader/writer and a non-contact IC card according modes of operations in the mobile phone (abstract, figs. 5, 7-9). Therefore, it would have been obvious to one skilled in the art at the time the invention was made to have modified Masui, modified by Arisawa in order to provide power to a mobile to operate a reader/writer as well to a contactless IC card.

because without the battery to supply power, the mobile phone can not operate (or more information about a battery to supply power in a mobile phone to operate as a reader/writer or a contactless IC card see Arisawa et al. (US 2009/0237144 A1) .

Conclusion

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Simon Nguyen whose telephone number is (571) 272-7894. The examiner can normally be reached on Monday-Friday from 7:00 AM to 6:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duc M. Nguyen can be reached on (571) 272-7503. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

October 8, 2009

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/SIMON D NGUYEN/

Primary Examiner, Art Unit 2618